## **CLAIMS**

- 1. A pharmaceutical composition comprising a substance that inhibits secretase activity.
- 2. The pharmaceutical composition according to Claim 1, wherein the secretase is  $\beta$ -secretase or  $\gamma$ -secretase.

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- 3. The pharmaceutical composition according to Claim 1 or 2, wherein the substance that inhibits secretase activity is a substance that promotes the sensitivity of a secretase inhibitor.
- 4. The pharmaceutical composition according to Claim 3, wherein the substance that promotes the sensitivity of a secretase inhibitor is a substance that inhibits expression of synoviolin.
  - 5. The pharmaceutical composition according to Claim 4, wherein the substance that inhibits expression of synoviolin is siRNA or shRNA for a gene coding for synoviolin.
  - 6. The pharmaceutical composition according to Claim 5, wherein the gene coding for synoviolin comprises the nucleotide sequence represented by SEQ ID NO: 1.
    - 7. The pharmaceutical composition according to Claim 5, wherein the siRNA targets part of the nucleotide sequence represented by SEQ ID NO: 1.
- 8. The pharmaceutical composition according to Claim 7, wherein the part of the nucleotide sequence is at least one selected from the nucleotide sequences represented by SEQ ID NOS 3-16.
  - 9. The pharmaceutical composition according to Claim 1 or 2 wherein the substance that inhibits secretase activity is synoviolin.
- The pharmaceutical composition according to any one of Claims 1 through
  9 for treating a cerebro-neurological disease.
  - 11. The pharmaceutical composition according to Claim 10, wherein the cerebro-neurological disease is Alzheimer's disease.
  - 12. A method for inhibiting secretase activity wherein the sensitivity of a secretase inhibitor is promoted.
- 30 13. The method according to Claim 12, wherein the sensitivity of a secretase inhibitor is promoted by inhibiting expression of synoviolin.
  - 14. A method for inhibiting secretase activity wherein synoviolin is bound to Herp.
    - 15. The method according to Claim 14, wherein the binding region of Herp

with synoviolin is the region represented by amino acid residues Nos. 161-200 in the amino acid sequence of Herp.

16. The method according to any one of Claims 12 through 15, wherein the secretase is  $\beta$ -secretase or  $\gamma$ -secretase.